FIG. 1

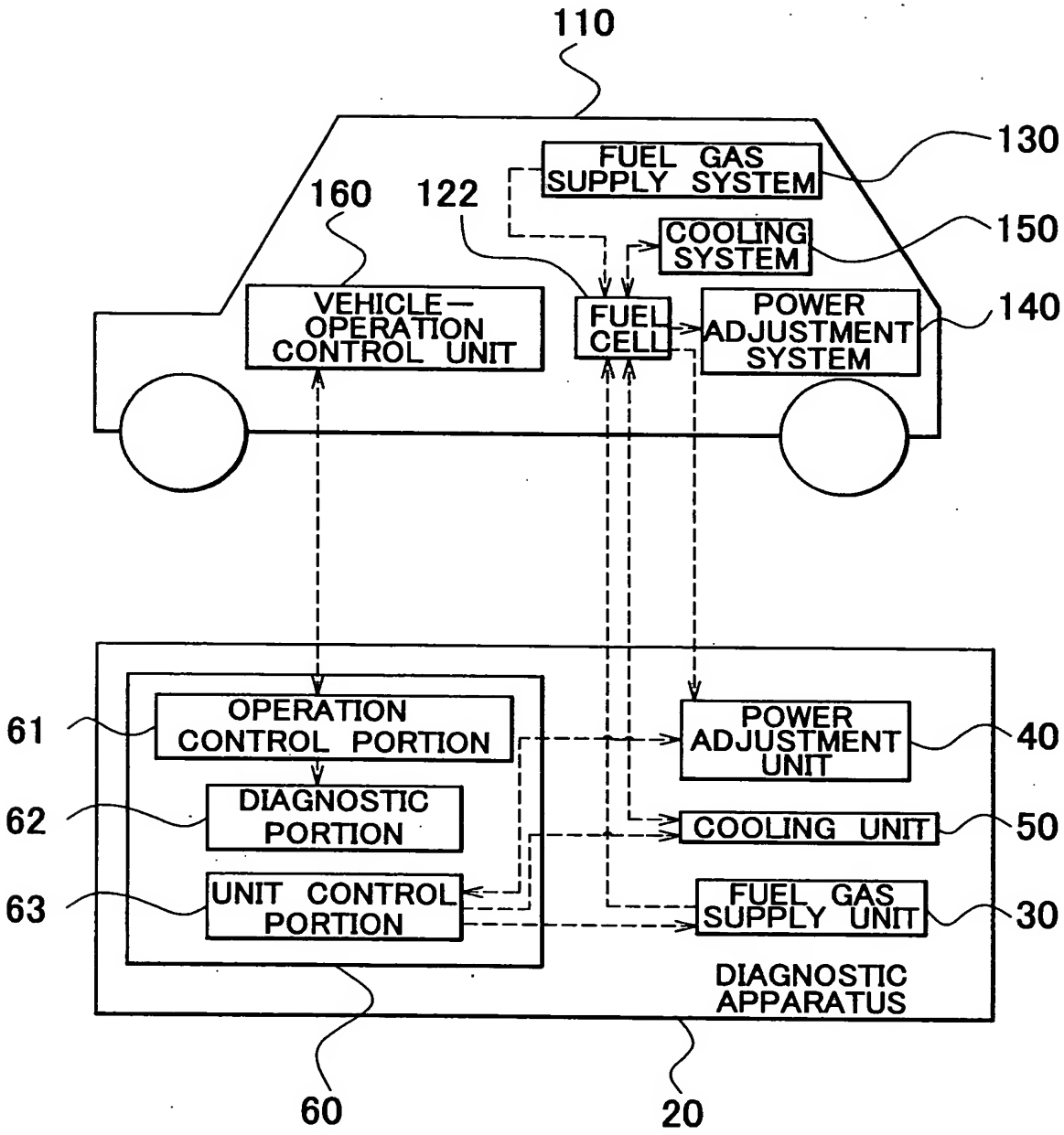

110
FUEL GAS SUPPLY SYSTEM
130
160
122
COOLING SYSTEM
150
VEHICLE— OPERATION CONTROL UNIT
FUEL CELL
POWER ADJUSTMENT SYSTEM
140
61
OPERATION CONTROL PORTION
POWER ADJUSTMENT UNIT
40
62
DIAGNOSTIC PORTION
COOLING UNIT
50
63
UNIT CONTROL PORTION
FUEL GAS SUPPLY UNIT
30
DIAGNOSTIC APPARATUS
60
20

FIG.2

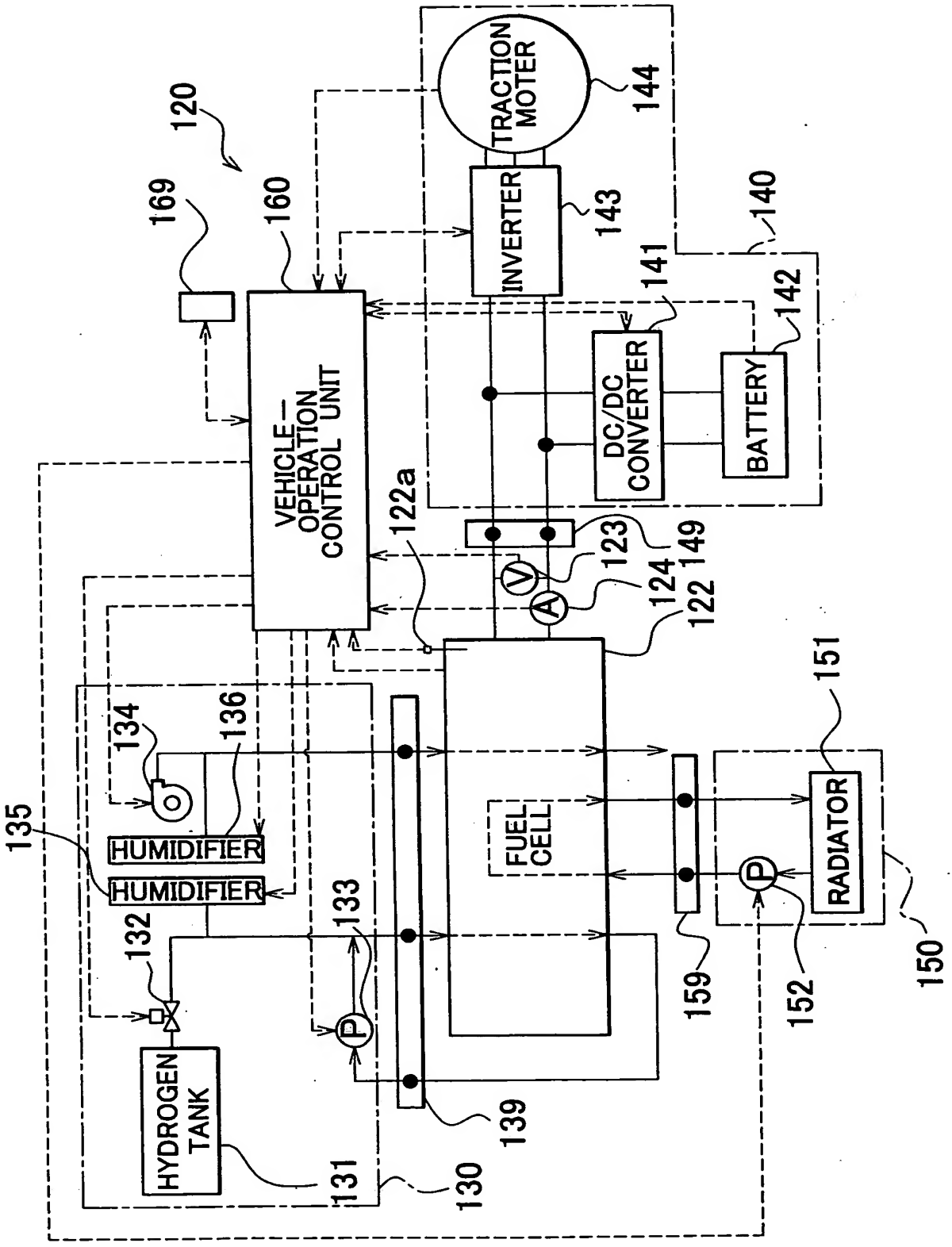

TRACTION MOTER
144
120
INVERTER
143
140
169
160
141
142
VEHICLE OPERATION CONTROL UNIT
DC/DC CONVERTER
BATTERY
122a
123
149
124
122
151
134
136
135
HUMIDIFIER
HUMIDIFIER
FUEL CELL
RADIATOR
132
133
159
152
150
HYDROGEN TANK
131
130
139

FIG. 3

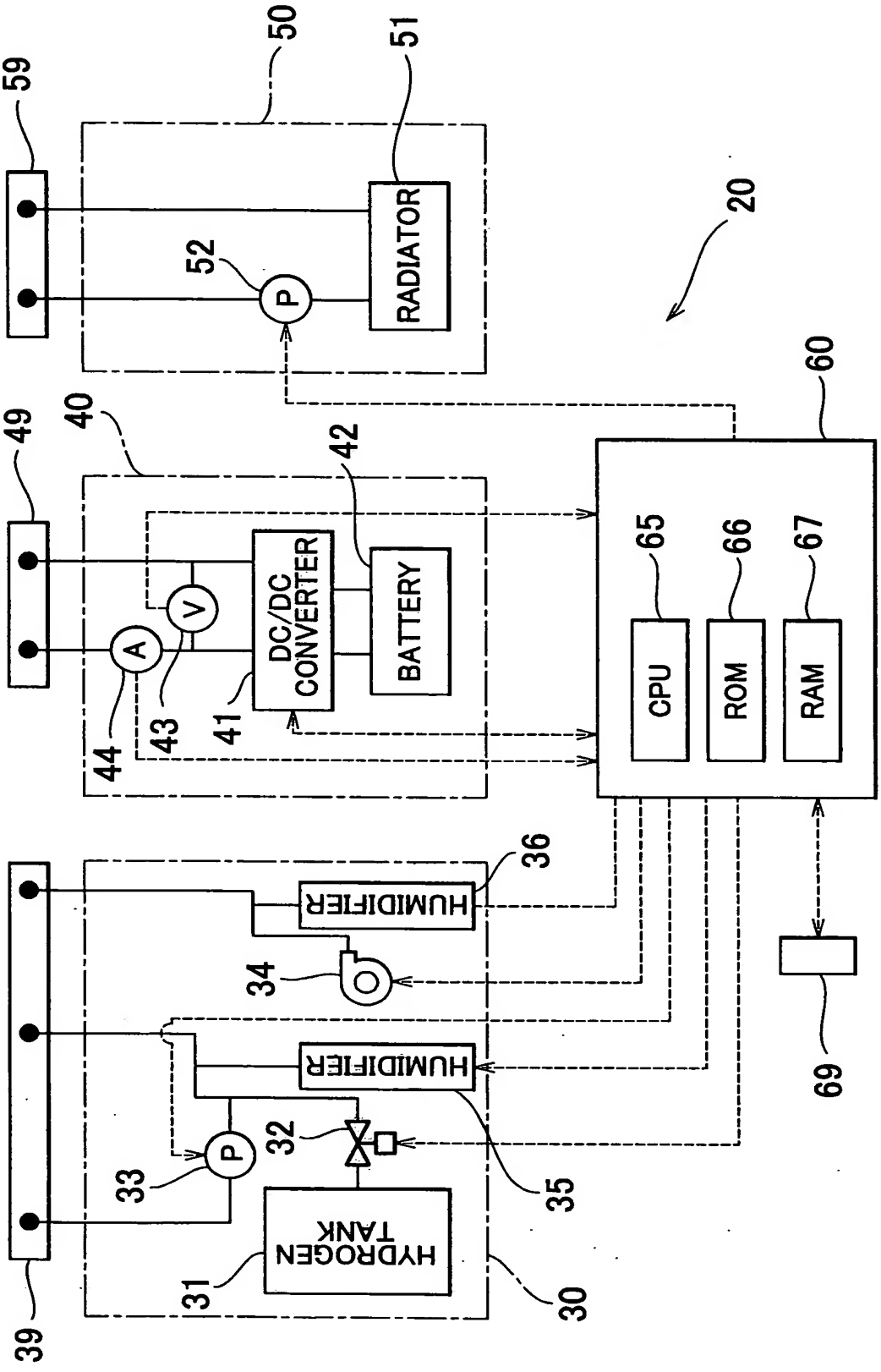

50
51
59
RADIATOR
52
P
20
60
49
40
42
65
66
67
DC/DC CONVERTER
BATTERY
V
A
CPU
ROM
RAM
44
43
41
36
HUMIDIFIER
34
HUMIDIFIER
32
P
33
35
HYDROGEN TANK
31
30
39
69

FIG. 4

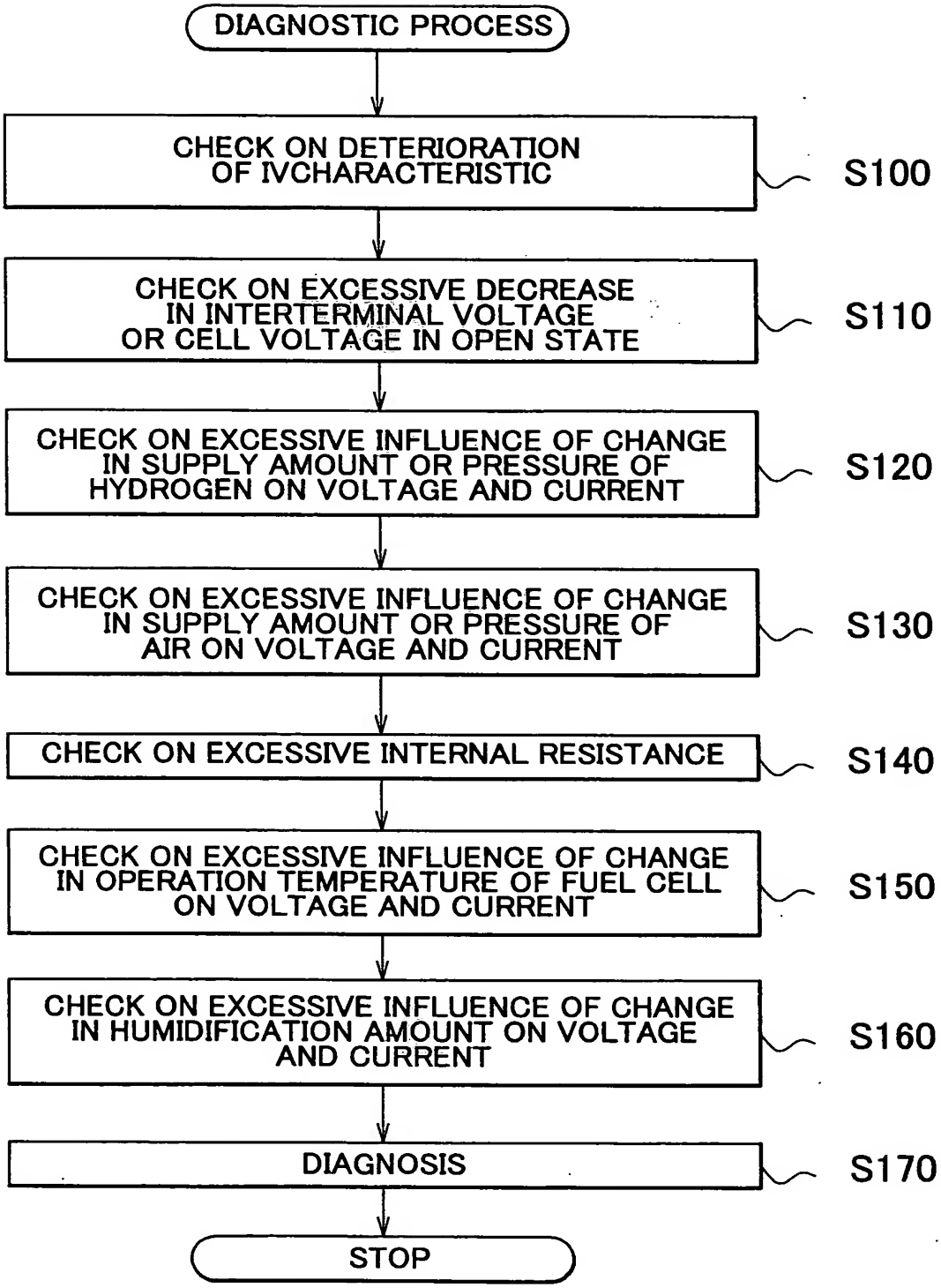

DIAGNOSTIC PROCESS
CHECK ON DETERIORATION OF IVCHARACTERISTIC
S100
CHECK ON EXCESSIVE DECREASE IN INTERTERMINAL VOLTAGE OR CELL VOLTAGE IN OPEN STATE
S110
CHECK ON EXCESSIVE INFLUENCE OF CHANGE IN SUPPLY AMOUNT OR PRESSURE OF HYDROGEN ON VOLTAGE AND CURRENT
S120
CHECK ON EXCESSIVE INFLUENCE OF CHANGE IN SUPPLY AMOUNT OR PRESSURE OF AIR ON VOLTAGE AND CURRENT
S130
CHECK ON EXCESSIVE INTERNAL RESISTANCE
S140
CHECK ON EXCESSIVE INFLUENCE OF CHANGE IN OPERATION TEMPERATURE OF FUEL CELL ON VOLTAGE AND CURRENT
S150
CHECK ON EXCESSIVE INFLUENCE OF CHANGE IN HUMIDIFICATION AMOUNT ON VOLTAGE AND CURRENT
S160
DIAGNOSIS
S170
STOP

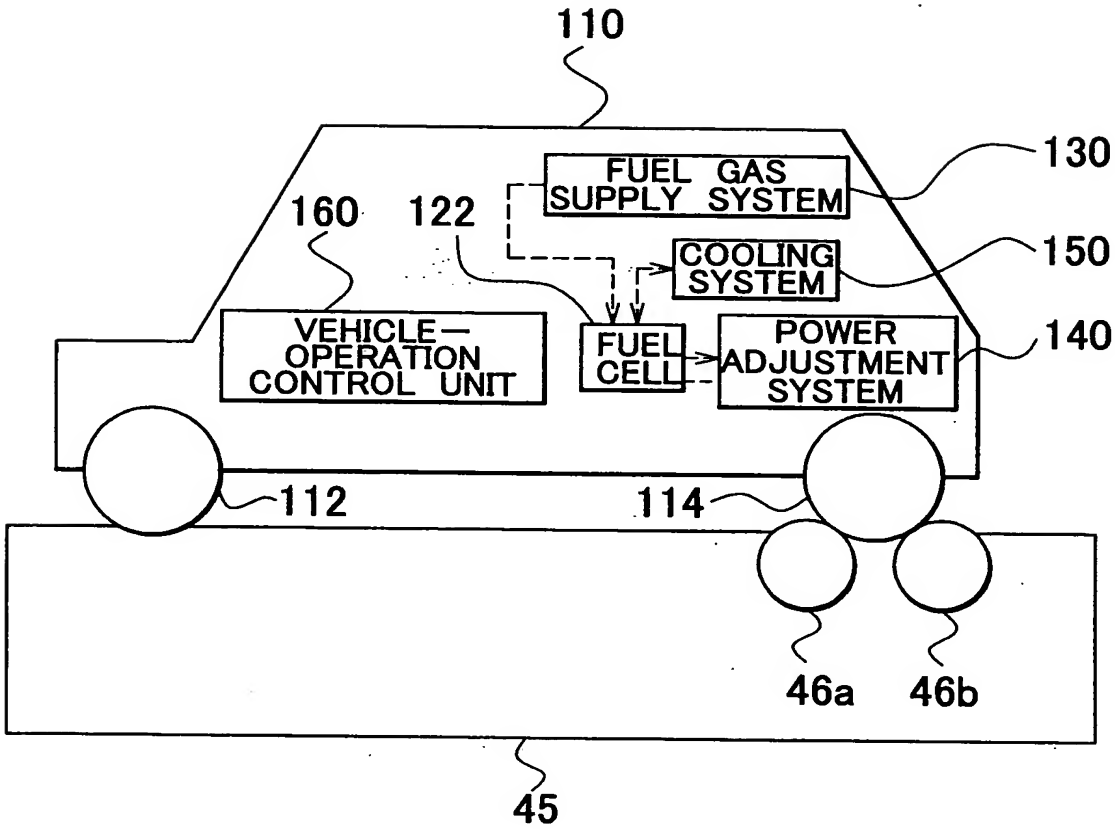
FIG. 5A

	DETERIORATION OF IV CHARACTERISTIC (BETWEEN TERMINALS)	DETERIORATION OF IV CHARACTERISTIC (DECREASE IN VOLTAGE IN CELL)	DECREASE IN CELL VOLTAGE IN OPEN STATE	EXCESSIVE SPEED AT WHICH VOLTAGE IS DECREASED IN OPEN STATE WHEN GAS SUPPLY IS STOPPED	DECREASE IN INTERTERMINAL VOLTAGE IN OPEN STATE	EXCESSIVE INTERNAL RESISTANCE
CROSS-LEAK DUE TO DETERIORATION OF MEMBRANE	×	○	○	○	△	×
DETERIORATION OF CATALYST	△	○	?	×	?	×
SHORT CIRCUIT INSIDE MODULE	×	?	○	○	×	×
CONTACT FAILURE OF CELL MONITOR TERMINAL	×	×	○	×	×	×
ABNORMALITY OF CELL MONITOR SUBSTRATE	×	×	○	×	○	×
CONTAMINATION (METALLIC ION)	×	○	×	×	×	×
INSUFFICIENCY OF AIR (SYSTEM SIDE)	○	○	△	△	△	×
INSUFFICIENCY OF HYDROGEN (SYSTEM SIDE)	○	○	△	△	△	×
DRY UP (INSUFFICIENT HUMIDIFICATION)	○	○	○	×	○	○
DRY UP (INSUFFICIENT COOLING)	○	○	○	×	○	○
CLOGGING WITH FOREIGN MATERIAL (ANODE)	×	○	△	△	△	×
CLOGGING WITH FOREIGN MATERIAL (CATHODE)	×	○	△	△	△	×
FLOODING (ANODE)	×	○	△	△	△	×
FLODDING (CATHODE)	×	○	△	△	△	×

FIG. 5B

	EXCESSIVE INCREASE IN EXHAUST GAS TEMPERATURE IN AIR SYSTEM	EXCESSIVE INFLUENCE OF CHANGE IN SUPPLY AMOUNT OF HYDROGEN	EXCESSIVE INFLUENCE OF CHANGE IN SUPPLY AMOUNT OF AIR	EXCESSIVE INFLUENCE OF DIFFERENTIAL PRESSURE BETWEEN HYDROGEN AND AIR	EXCESSIVE INFLUENCE OF CHANGE IN HUMIDIFICATION AMOUNT	EXCESSIVE INFLUENCE OF CHANGE IN TEMPERATURE
CROSS-LEAK DUE TO DETERIORATION OF MEMBRANE	×	×	○	○	×	×
DETERIORATION OF CATALYST	×	×	×	×	×	×
SHORT CIRCUIT INSIDE MODULE	×	×	×	×	×	×
CONTACT FAILURE OF CELL MONITOR TERMINAL	×	×	×	×	×	×
ABNORMALITY OF CELL MONITOR SUBSTRATE	×	×	×	×	×	×
CONTAMINATION (METALLIC ION)	×	×	×	×	×	×
INSUFFICIENCY OF AIR (SYSTEM SIDE)	×	×	○	×	×	×
INSUFFICIENCY OF HYDROGEN (SYSTEM SIDE)	×	○	×	×	×	×
DRY UP (INSUFFICIENT HUMIDIFICATION)	×	×	×	×	○	○
DRY UP (INSUFFICIENT COOLING)	○	×	×	×	○	○
CLOGGING WITH FOREIGN MATERIAL (ANODE)	×	○	×	×	×	×
CLOGGING WITH FOREIGN MATERIAL (CATHODE)	×	×	○	×	×	×
FLOODING (ANODE)	×	○	×	×	○	○
FLODDING (CATHODE)	×	×	○	×	○	○

FIG. 6


110
130
FUEL GAS SUPPLY SYSTEM
160
122
150
COOLING SYSTEM
VEHICLE— OPERATION CONTROL UNIT
FUEL CELL
POWER ADJUSTMENT SYSTEM
140
112
114
46a
46b
45